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February 27, 2018

#### **VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd Chief Clerk/Administrator Public Service Commission of South Carolina 101 Executive Center Drive, Suite 100 Columbia, South Carolina 29210

Re: Duke Energy Progress, LLC – Monthly Fuel Report Docket No. 2006-176-E

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's Monthly Fuel Report in Docket No. 2006-176-E for the month of January 2018.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803-988-7130.

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Sincerely,

Rebecca J. Dulin

Enclosure

cc: Service List

### Duke Energy Progress Summary of Monthly Fuel Report

Schedule 1

Line No.	<u>Item</u>	_	January 2018
1	Fuel and Fuel-related Costs excluding DERP incremental costs	\$	323,535,270
	MWH sales:		
2	Total System Sales		7,180,233
3	Less intersystem sales		391,129
4	Total sales less intersystem sales		6,789,104
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)	_	4.7655
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4)		2.5384
	Generation Mix (MWH):		
	Fossil (By Primary Fuel Type):		
7	Coal		1,440,315
8	Oil		292,605
9	Natural Gas - Combustion Turbine		85,828
10	Natural Gas - Combined Cycle		1,908,589
11	Total Fossil	_	3,727,337
12	Nuclear		2,535,371
13	Hydro - Conventional		51,203
14	Solar Distributed Generation		17,713
15	Total MWH generation		6,331,624

Note: Detail amounts may not add to totals shown due to rounding.

# Duke Energy Progress Details of Fuel and Fuel-Related Costs

Description	<b>J</b>	anuary 2018
Fuel and Fuel-Related Costs:		
Steam Generation - Account 501		
0501110 coal consumed - steam	\$	46,430,217
0501310 fuel oil consumed - steam		1,307,995
Total Steam Generation - Account 501		47,738,212
Nuclear Generation - Account 518		
0518100 burnup of owned fuel		17,239,604
Other Generation - Account 547		
0547000 natural gas consumed - Combustion Turbine		9,219,674
0547000 natural gas capacity - Combustion Turbine		611,841
0547000 natural gas consumed - Combined Cycle		130,056,584
0547000 natural gas capacity - Combined Cycle		10,873,020
0547200 fuel oil consumed		59,763,976
Total Other Generation - Account 547		210,525,095
Purchased Power and Net Interchange - Account 555		
Fuel and fuel-related component of purchased power		78,160,549
Fuel and fuel-related component of DERP purchases		1,250
PURPA purchased power capacity		2,569,809
DERP purchased power capacity		345
Total Purchased Power and Net Interchange - Account 555		80,731,953
Less fuel and fuel-related costs recovered through intersystem sales - Account 447		35,052,633
Total Costs Included in Base Fuel Component	\$	321,182,231
Environmental Costs		
0509030, 0509212, 0557451 emission allowance expense	\$	2,739
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense		2,370,135
Emission Allowance Gains		-
Less reagents expense recovered through intersystem sales - Account 447		3,043
Less emissions expense recovered through intersystem sales - Account 447		16,793
Total Costs Included in Environmental Component		2,353,038
Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$</u>	323,535,270
DERP Incremental Costs		135,809
Total Fuel and Fuel-related Costs	\$	323,671,079

Notes: Detail amounts may not add to totals shown due to rounding.

## DUKE ENERGY PROGRESS PURCHASED POWER AND INTERCHANGE SOUTH CAROLINA

JANUARY 2018

Schedule 3, Purchases Page 1 of 2

Purchased Power	_	Total	 Capacity	Non-capacity				
Marketers, Utilities, Other		\$	\$	mWh		Fuel \$		Non-fuel \$
Virginia Electric and Power Company - Emergency	\$	89,001	-	890	\$	54,290	\$	34,711
Broad River Energy, LLC.		17,331,445	\$ 2,344,809	128,281		14,986,636		-
City of Fayetteville		9,367,159	1,071,600	38,734		8,295,559		-
Haywood EMC		29,050	29,050	-		-		-
NCEMC		11,313,380	4,131,664	37,184		7,181,716		-
PJM Interconnection, LLC.		3,577,385	-	41,075		3,577,385		-
Southern Company Services		5,728,975	1,687,140	102,122		4,041,835		-
DE Carolinas - Native Load Transfer		24,653,675	-	255,110		24,646,687		6,988
DE Carolinas - Native Load Transfer Benefit		2,101,417	-	-		2,101,417		-
Energy Imbalance		3,378		5		3,349		29
Generation Imbalance		3,934		126		2,400		1,534
	\$	74,198,799	\$ 9,264,263	603,527	\$	64,891,274	\$	43,262
Act 236 PURPA Purchases								
Renewable Energy	\$	11,389,200	-	186,133	\$	11,389,200		-
DERP Qualifying Facilities		1,595	-	37		1,595		-
Other Qualifying Facilities		4,449,884	-	81,686		4,449,884		-
	\$	15,840,679	\$ <u>-</u>	267,856	\$	15,840,679	\$	-
Total Purchased Power	\$	90,039,478	\$ 9,264,263	871,383	\$	80,731,953	\$	43,262

NOTE: Detail amounts may not add to totals shown due to rounding.

## DUKE ENERGY PROGRESS INTERSYSTEM SALES\* SOUTH CAROLINA

JANUARY 2018

Schedule 3, Sales Page 2 of 2

	_	Total Capacity		Non-capacity					
Sales		\$		\$	mWh		Fuel\$		Non-fuel \$
Market Based:									
NCEMC Purchase Power Agreement	\$	1,594,649	\$	652,500	16,960	\$	4,312,654	\$	(3,370,505)
PJM Interconnection, LLC.		119,510		-	2,733		102,739		16,771
Other:									
DE Carolinas - Native Load Transfer Benefit		1,714,647		-	-		1,714,647		-
DE Carolinas - Native Load Transfer		29,065,100		-	371,396		28,942,429		122,671
Generation Imbalance		-		-	40		-		-
Total Intersystem Sales	\$	32,493,906	\$	652,500	391,129	\$	35,072,469	\$	(3,231,063)

NOTE: Detail amounts may not add to totals shown due to rounding.

<sup>\*</sup> Sales for resale other than native load priority.

### Duke Energy Progress (Over) / Under Recovery of Fuel Costs January 2018

Sched	ule 4
Page 1	of 3

Line No.			Total Residential	General Service Non-Demand	Demand	Lighting	Total
1	Actual System kWh sales	Input					6,789,103,851
2	DERP Net Metered kWh generation	Input					751,073
3	Adjusted System kWh sales	L1 + L2				_	6,789,854,924
4	Actual S.C. Retail kWh sales	Input	290,755,069	31,747,164	381,841,798	6,784,249	711,128,280
5	DERP Net Metered kWh generation	Input	250,010	9,394	491,669		751,073
6	Adjusted S.C. Retail kWh sales	L4 + L5	291,005,079	31,756,558	382,333,467	6,784,249	711,879,353
7	Actual S.C. Demand units (kw)	L32 / 31b *100			712,986		
Base fuel o	component of recovery - non-capacity						
8	Incurred System base fuel - non-capacity expense	Input					\$307,125,966
9	Eliminate avoided fuel benefit of S.C. net metering	Input				_	\$24,054
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9					\$307,150,020
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					4.524
12	S.C. Retail portion of adjusted incurred system expense	L6 * L11 / 100	\$13,164,083	\$1,436,559	\$17,295,470	\$306,896	\$32,203,008
13	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(\$12,891)	(\$1,300)	(\$9,863)	\$0	(\$24,054)
14	S.C. Retail portion of incurred system expense	L12 + L13	\$13,151,192	\$1,435,259	\$17,285,607	\$306,896	\$32,178,954
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	2.211	2.210	2.210	2.210	2.210
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$6,429,223	\$701,612	\$8,438,704	\$149,932	\$15,719,471
17	DERP NEM incentive - fuel component	Input	(\$3,584)	(\$362)	(\$2,742)	\$0	(\$6,688)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$6,425,639	\$701,250	\$8,435,962	\$149,932	\$15,712,783
19	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L18 - L14	\$6,725,553	\$734,009	\$8,849,645	\$156,964	\$16,466,171
20	Adjustment - Economic Purchases	Input	\$0	\$0	\$0	\$0	\$0
21	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L19 + L20	\$6,725,553	\$734,009	\$8,849,645	\$156,964	\$16,466,171
	component of recovery - capacity	100/14*100	0.000	0.050			
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.299	0.253	70		
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L7 * 100	\$870,250	¢00 202	73 \$521,520		\$1,472,163
23 24a	Incurred S.C. base fuel - capacity expense Billed base fuel - capacity rates by class (¢/kWh)	Input Input	\$670,250 0.472	\$80,393 0.371	\$321,320		\$1,472,103
24a 24b	Billed base fuel - capacity rate (¢/kW)	Input	0.472	0.371	96		
25	Billed S.C. base fuel - capacity revenue	L24a * L4 /100	\$1,371,297	\$117,782 \$		\$0	\$2,173,550
26	S.C. base fuel - capacity (over)/under recovery [See footnote]	L25 - L23	(\$501,047)	(\$37,389)	(162,951.00)	\$0	(\$701,387)
27	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
28	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	L26 + L27	(\$501,047)	(\$37,389)	(\$162,951)	\$0	(\$701,387)
Environme	ental component of recovery						
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.050	0.042			
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100			12		
30	Incurred S.C. environmental expense	Input	\$145,698	\$13,459	\$87,313		\$246,470
31a	Billed environmental rates by class (¢/kWh)	Input	0.035	0.024			
31b	Billed environmental rate (¢/kW)	Input			7		
32	Billed S.C. environmental revenue	L31a * L4 /100	\$101,043	\$7,619 \$	•		\$158,571
33	S.C. environmental (over)/under recovery [See footnote]	L32 - L30	\$44,655	\$5,840	\$37,404	\$0	\$87,899
34	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
35	Total S.C. environmental (over)/under recovery [See footnote]	L33 + L34	\$44,655	\$5,840	\$37,404	\$0	\$87,899
	Energy Resource Program component of recovery: avoided costs	127/14*100	0.000	0.000			
36a	Incurred S.C. DERP avoided cost rates by class (¢/kWh)	L37 / L4 * 100	0.000	0.000	0.000		
36b	Incurred S.C. DERP avoided cost rates by class (¢/kW)	L37 / L7 * 100	002	0.2	0.008		\$166
37 38a	Incurred S.C. DERP avoided cost expense Billed S.C. DERP avoided cost rates by class (¢/kWh)	Input Input	\$99 0.000	\$9 0.000	\$58		\$166
30a 38b	Billed S.C. DERP avoided cost rates by class (¢/kW)	Input	0.000	0.000	0.000		
39	Billed S.C. DERP avoided cost revenue	L38a * L4 /100	\$0	\$0	\$0		\$0
40	S.C. DERP avoided cost (over)/under recovery [See footnote]	L39 - L37	\$99	\$9	\$58	\$0	\$166
40	Adjustment	Input	\$0	\$0	\$0 \$0	\$0 \$0	\$100
42	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L40 + L41	\$99	\$9	\$58	\$0	\$166

L21 + L28 + L35 + L42

\$6,269,260

\$702,469

\$8,724,156

\$156,964

\$15,852,849

Total (over)/under recovery [See footnote]

### Duke Energy Progress (Over) / Under Recovery of Fuel Costs January 2018

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	•	
Year 2017-20	1	ì

Cumulative (over) / under recovery - BASE FUEL NON-CAPACITY	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
_/2 Balance ending February 2017	\$6,872,181				-	
March 2017 - actual	9,008,686	\$763,399	\$98,306	\$1,239,859	\$34,941	\$2,136,505
April 2017 - actual	10,494,432	426,888	62,439	973,844	22,575	1,485,746
May 2017 - actual	9,808,868	(173,333)	(27,502)	(475,412)	(9,317)	(685,564)
June 2017 - actual	11,236,626	488,131	74,799	844,641	20,187	1,427,758
July 2017 - actual	11,772,725	172,369	25,506	332,436	5,788	536,099
August 2017 - actual	11,986,788	72,808	10,890	127,812	2,553	214,063
September 2017 - actual	10,024,599	(684,686)	(110,532)	(1,141,999)	(24,972)	(1,962,189)
October 2017 - actual	8,131,446	(500,633)	(83,695)	(1,284,814)	(24,011)	(1,893,153)
November 2017 - actual	7,039,997	(314,738)	(48,923)	(712,179)	(15,609)	(1,091,449)
December 2017 - actual	8,306,588	504,163	63,542	680,112	18,774	1,266,591
January 2018 - actual	24,772,759	6,725,553	734,009	8,849,645	156,964	16,466,171
_/3 February 2018 - forecast	23,516,000	(498,253)	(50,487)	(691,561)	(16,458)	(1,256,759)
_/3 March 2018 - forecast	22,911,404	(226,932)	(25,207)	(344,250)	(8,207)	(604,596)
_/3 April 2018 - forecast	22,367,848	(174,787)	(24,640)	(336,156)	(7,973)	(543,556)
_/3 May 2018 - forecast	21,868,861	(141,821)	(23,929)	(325,520)	(7,717)	(498,987)
_/3 June 2018 - forecast	\$21,557,986	(\$97,775)	(\$14,271)	(\$194,243)	(\$4,586)	(\$310,875)

### Year 2017-2018

Year 2017-2018						
Cumulative (over) / under recovery - BASE FUEL CAPACITY	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
-		Total Nesidefilial			=-99	. o.a.
_/2 Balance ending February 2017	\$893,261					
March 2017 - actual	806,670	(\$56,692)	(\$2,999)	(\$26,900)	\$0	(\$86,591)
April 2017 - actual	855,256	34,522	2,742	11,322	0	48,586
May 2017 - actual	863,837	16,521	(860)	(7,080)	0	8,581
June 2017 - actual	1,093,070	111,106	8,714	109,413	0	229,233
July 2017 - actual	1,329,570	92,732	(6,332)	150,100	0	236,500
August 2017 - actual	1,544,702	102,543	(7,486)	120,075	0	215,132
September 2017 - actual	1,721,380	110,370	(11,647)	77,955	0	176,678
October 2017 - actual	2,170,530	335,395	12,870	100,885	0	449,150
November 2017 - actual	2,359,492	190,857	5,518	(7,413)	0	188,962
December 2017 - actual	2,239,809	(97,259)	(8,258)	(14,166)	0	(119,683)
January 2018 - actual	1,538,422	(501,047)	(37,389)	(162,951)	0	(701,387)
_/3 February 2018 - forecast	(28,074)	(968,169)	(66,267)	(532,060)	0	(1,566,496)
_/3 March 2018 - forecast	(73,242)	(19,865)	10,374	(35,677)	0	(45,168)
_/3 April 2018 - forecast	165,734	222,846	11,083	5,047	0	238,976
_/3 May 2018 - forecast	580,636	320,553	10,919	83,430	0	414,902
_/3 June 2018 - forecast	\$592,670	\$105,818	\$2,471	(\$96,255)	\$0	\$12,034

### Year 2017-2018

			General Service			
Cumulative (over) / under recovery - ENVIRONMENTAL	Cumulative	Total Residential	Non-Demand	Demand	Lighting	Total
_/2 Balance ending February 2017	(\$618,034)		•			
March 2017 - actual	(633,513)	(\$13,791)	(\$1,056)	(\$632)	\$0	(\$15,479)
April 2017 - actual	(682,896)	(27,527)	(3,223)	(18,633)	0	(49,383)
May 2017 - actual	(718,603)	(19,646)	(2,877)	(13,184)	0	(35,707)
June 2017 - actual	(729,460)	(12,726)	(2,238)	4,107	0	(10,857)
July 2017 - actual	(639,166)	45,068	4,415	40,811	0	90,294
August 2017 - actual	(570,303)	35,153	3,230	30,480	0	68,863
September 2017 - actual	(606,640)	(19,149)	(2,616)	(14,572)	0	(36,337)
October 2017 - actual	(634,976)	(8,894)	(1,628)	(17,814)	0	(28,336)
November 2017 - actual	(675,922)	(15,979)	(1,925)	(23,042)	0	(40,946)
December 2017 - actual	(653,319)	8,725	1,739	12,139	0	22,603
January 2018 - actual	(565,420)	44,655	5,840	37,404	0	87,899
_/3 February 2018 - forecast	(547,845)	(64,527)	10,448	71,654	0	17,575
_/3 March 2018 - forecast	(544,673)	1,308	1,797	67	0	3,172
_/3 April 2018 - forecast	(562,867)	(3,490)	(410)	(14,294)	0	(18,194)
_/3 May 2018 - forecast	(568,957)	3,267	(450)	(8,907)	0	(6,090)
_/3 June 2018 - forecast	(\$515,149)	\$35,374	\$3,799	\$14,635	\$0	\$53,808

			General Service			
Cumulative (over) / under recovery - DERP AVOIDED COSTS	Cumulative	Total Residential	Non-Demand	Demand	Lighting	Total
_/2 Balance ending February 2017	\$0					
March 2017 - actual	0	\$0	\$0	\$0	\$0	\$0
April 2017 - actual	0	0	0	0	0	0
May 2017 - actual	0	0	0	0	0	0
June 2017 - actual	252	135	14	103	0	252
July 2017 - actual	252	0	0	0	0	0
August 2017 - actual	252	0	0	0	0	0
September 2017 - actual	252	0	0	0	0	0
October 2017 - actual	252	0	0	0	0	0
November 2017 - actual	252	0	0	0	0	0
December 2017 - actual	252	0	0	0	0	0
January 2018 - actual	418	99	9	58	0	166
_/3 February 2018 - forecast	6,488	3,253	328	2,489	0	6,070
_/3 March 2018 - forecast	12,541	3,244	327	2,482	0	6,053
_/3 April 2018 - forecast	18,892	3,404	343	2,604	0	6,351
_/3 May 2018 - forecast	25,048	3,299	333	2,524	0	6,156
_/3 June 2018 - forecast	\$30,855	\$3,112	\$314	\$2,381	\$0	\$5,807

### Duke Energy Progress (Over) / Under Recovery of Fuel Costs January 2018

Schedule 4 Page 3 of 3

Line No.			Residential	Commercial	Industrial	Total
Distributed	Energy Resource Program component of recovery: incremental costs			•		
44	Incurred S.C. DERP incremental expense	Input	\$80,282	\$31,860	\$23,667	\$135,809
45	Billed S.C. DERP incremental rates by account (\$/account)	Input	1.00	2.88	99.56	
46	Billed S.C. DERP incremental revenue	Input	\$137,829	\$93,005	\$26,682	\$257,516
47	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L46	(\$57,547)	(\$61,145)	(\$3,015)	(\$121,707)
48	Adjustment	Input	\$0	\$0	\$0	\$0
49	Total S.C. DERP incremental (over)/under recovery [See footnote]	L47 + L48	(\$57,547)	(\$61,145)	(\$3,015)	(\$121,707)

Year	2017-2018

100. 2017 2010		
Cumulative (over) / under recovery	Cumulative	Total
_/2 Balance ending February 2017	\$391,293	•
March 2017 - actual	371,761	(\$19,532)
April 2017 - actual	379,969	8,208
May 2017 - actual	399,488	19,519
June 2017 - actual	460,764	61,276
July 2017 - actual	325,094	(135,670)
August 2017 - actual	196,111	(128,983)
September 2017 - actual	99,713	(96,398)
October 2017 - actual	(44,209)	(143,922)
November 2017 - actual	(183,930)	(139,721)
December 2017 - actual	(291,982)	(108,052)
January 2018 - actual	(413,689)	(121,707)
_/3 February 2018 - forecast	(495,088)	(81,399)
_/3 March 2018 - forecast	(566,211)	(71,123)
_/3 April 2018 - forecast	(629,778)	(63,567)
_/3 May 2018 - forecast	(686,800)	(57,022)
_/3 June 2018 - forecast	(\$737,406)	(\$50,606)

### Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts.

Under collections, or regulatory assets, are shown as positive amounts.

\_/1 Total residential billed fuel rate is a composite rate reflecting the approved residential rate of 2.246 and RECD 5% discount.

\_/2 February 2017 ending balance reflects total adjustments of \$(129,849) pursuant to the docket no. 2017-1-E directive.

\_/3 Forecast amounts based on low end of range of expected fuel rates.

Description	Weatherspoon CT	Lee CC	Sutton CC/CT	Robinson Nuclear	Asheville Steam	Asheville CT	Roxboro Steam	Mayo Steam
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	\$2,584,236	-	\$11,195,981	\$3,889,260
Oil	651,679	-	-	8,505	11,230,818	-	941,286	207,719
Gas - CC	-	50,911,471	30,395,112	-	-	-	-	-
Gas - CT	23	-	1,494,166	-	-	57,794	-	-
Total	651,702	\$50,911,471	\$31,889,278	\$8,505	\$13,815,054	\$57,794	\$12,137,267	\$4,096,979
Average Cost of Fuel Purchased (¢/MBTU)	)							
Coal	-	-	-	-	316.36	-	338.62	321.69
Oil	1,774.68	-	-	1,232.61	1,806.25	-	1,535.51	1,538.66
Gas - CC	-	1,046.10	1,124.15	-	-	-	-	-
Gas - CT	1,774.74	1,046.10	1,072.05 1,121.60	1 222 61	- 060 20	- 0.00	360.41	335.13
Weighted Average	1,774.74	1,046.10	1,121.60	1,232.61	960.29	0.00	300.41	333.13
Cost of Fuel Burned (\$) Coal	_	-	-	-	\$6,339,946	_	\$30,055,749	\$10,034,522
Oil - CC	-	-	_	_	-	-	-	-
Oil - Steam/CT	377,380	-	-	-	59,547	9,752,336	966,616	281,832
Gas - CC	-	50,911,471	30,395,112	-	-	-	-	-
Gas - CT	23	-	1,494,166	-	-	57,794	-	-
Nuclear	-	-	-	4,109,529	-	-	-	-
Total	\$377,403	\$50,911,471	\$31,889,278	\$4,109,529	\$6,399,493	\$9,810,130	\$31,022,365	10,316,354
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	281.09	-	322.31	326.11
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	1,582.44	-	-	-	1,646.31	1,646.37	1,487.15	1,464.21
Gas - CC	-	1,046.10	1,124.15	-	-	-	-	-
Gas - CT	-	-	1,072.05	- 60.21	-	-	-	-
Nuclear Weighted Average	1,582.54	1,046.10	1,121.60	69.31 69.31	283.27	1,656.13	330.37	333.18
Weighted Average	1,302.34	1,046.10	1,121.00	09.31	203.21	1,000.13	330.37	333.10
Average Cost of Generation (¢/kWh) Coal					3.33		3.13	3.45
Oil - CC	-	-	-	-	ა.აა	-	3.13	3.45
Oil - Steam/CT	28.23	_	_	_	19.57	19.25	14.53	15.49
Gas - CC	-	7.44	8.07	-	-	-	-	-
Gas - CT	-	-	9.24	-	-	-	-	-
Nuclear	-	-	-	0.69	-	-	-	-
Weighted Average	28.23	7.44	8.12	0.69	3.36	19.37	3.21	3.52
Burned MBTU's								
Coal	-	-	-	-	2,255,507	-	9,325,155	3,077,056
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	23,848	-	-	-	3,617	592,353	64,998	19,248
Gas - CC	-	4,866,787	2,703,821	-	-	-	-	-
Gas - CT	-	-	139,375	-	-	-	-	-
Nuclear	-	-	-	5,928,785	-	-	-	
Total	23,848	4,866,787	2,843,196	5,928,785	2,259,124	592,353	9,390,153	3,096,304
Net Generation (mWh)								
Coal	-	-	-	-	190,401	-	958,985	290,929
Oil - CC	-	-	-	-	-	<b>-</b>	-	<b>-</b>
Oil - Steam/CT	1,337	-	-	-	304	50,659	6,654	1,820
Gas - CC	-	684,490	376,539	-	-	-	-	-
Gas - CT Nuclear	-	-	16,179	- EOE 400	-	-	-	-
Hydro (Total System)	-	-	-	595,109	-	-	-	-
Solar (Total System) Total	1,337	684,490	392,718	595,109	190,705	50,659	965,639	292,749
	,	,	, -	,	,	,	,	, -
Cost of Reagents Consumed (\$) Ammonia							\$252,248	\$117,137
Limestone	<u>-</u> -	- -	-	- -	- 250,677	-	\$252,248 793,199	\$117,137 282,715
Re-emission Chemical	-	-	-	-	250,077	-	, as, i as	202, <i>I</i> 13
Sorbents	· -	· -	- -	- -	11,294	- -	267,275	190,449
Urea	-	-	-	-	176,777	-	-	-
Total	_	_	_	_	\$438.748		\$1.312.722	\$590.301

Notes:

Total

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

\$438,748

\$1,312,722

\$590,301

(A) Cents per MBTU is atypical for current month due to low output.

## Duke Energy Progress Fuel and Fuel Related Cost Report January 2018

					Smith Energy			
	Brunswick	Blewett	Wayne County	Darlington	Complex	Harris	Current	Total 12 ME
Description	Nuclear	СТ	СТ	СТ	CC/CT	Nuclear	Month	January 2018
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	-	-	\$17,669,477	\$275,216,096
Oil	12,757	-	20,145,809	20,439,770	11,767,980	-	65,406,323	78,802,798
Gas - CC	-	-	-	-	59,623,021	-	140,929,604	692,627,627
Gas - CT	-	-	47,130	645	8,231,757	-	9,831,515	90,552,565
Total	\$12,757	-	\$20,192,939	\$20,440,415	\$79,622,758	\$0	\$233,836,919	\$1,137,199,086
Average Cost of Fuel Purchased (¢/MBTU								
Coal	-	-	-	-	-	-	331.37	318.68
Oil	1,231.37	-	1,739.06	1,811.10	1,683.94	-	1,757.82	1,672.07
Gas - CC	-	-	-	-	1,007.51	-	1,044.82	471.97
Gas - CT	-	-	1,043.85	(A)	1,011.70	-	1,026.73	415.98
Weighted Average	1,231.37	-	1,736.36	1,811.15	1,071.59	-	995.09	437.92
Cost of Fuel Burned (\$)							<b>A40.400.04</b>	0040 005 400
Coal	-	-	-	-	-	-	\$46,430,217	\$316,925,182
Oil - CC	-	407.000	-	-	-	-	-	60,208
Oil - Steam/CT	-	127,306	20,516,806	17,838,490	11,151,657	-	61,071,970	76,967,433
Gas - CC	-	-	-	-	59,623,021	-	140,929,604	692,627,627
Gas - CT	-	-	47,130	645	8,231,757	-	9,831,515	90,552,565
Nuclear	8,899,907	-	-	-	-	4,230,168	17,239,604	201,045,586
Total	\$8,899,907	\$127,306	\$20,563,936	\$17,839,135	\$79,006,435	\$4,230,168	\$275,502,910	\$1,378,178,601
Average Cost of Fuel Burned (¢/MBTU)							242 = 2	244.22
Coal	-	-	-	-	-	-	316.76	314.22
Oil - CC	-	-	-	-	-	-	-	1,840.98
Oil - Steam/CT	-	1,667.84	1,746.73	1,754.09	1,660.26	-	1,708.34	1,634.67
Gas - CC	-	-	-	-	1,007.51	-	1,044.82	471.97
Gas - CT	-	-	1,043.85	(A)	1,011.70	-	1,026.73	415.98
Nuclear	63.05		<u> </u>	<u> </u>		65.45	65.04	64.98
Weighted Average	63.05	1,667.84	1,744.04	1,754.15	1,067.20	65.45	465.48	236.20
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	-	-	3.22	3.39
Oil - CC	-	-	-	-	-	-	-	20.33
Oil - Steam/CT	-	38.35	21.32	23.26	19.04	-	20.87	20.29
Gas - CC	-	-	-	-	7.03	-	7.38	3.37
Gas - CT	-	-	11.73	-	11.88	-	11.45	4.63
Nuclear Weighted Average	0.66 0.66	38.35	21.28	23.27	8.10	0.71	0.68 4.35	2.21
vvoigitiou / tvorage	0.00	00.00	21.20	20.21	0.10	0.71	4.00	2.21
Burned MBTU's								
Coal	-	-	-	-	-	-	14,657,718	100,861,480
Oil - CC	-	-	-	-	-	-	-	3,270
Oil - Steam/CT	-	7,633	1,174,584	1,016,964	671,681	-	3,574,926	4,708,449
Gas - CC	-	-	-	-	5,917,843	-	13,488,451	146,753,884
Gas - CT	-	-	4,515	5	813,658	-	957,553	21,768,639
Nuclear	14,116,093	-	-	-	-	6,463,171	26,508,049	309,384,125
Total	14,116,093	7,633	1,179,099	1,016,969	7,403,182	6,463,171	59,186,697	583,479,848
Net Generation (mWh)								
Coal	-	-	-	-	-	-	1,440,315	9,352,085
Oil - CC	-	-	-	-	-	-	-	296
Oil - Steam/CT	-	332	96,228	76,707	58,564	-	292,605	379,407
Gas - CC	-	-	-	-	847,560	-	1,908,589	20,572,323
Gas - CT	-	-	402	(33)	69,280	-	85,828	1,953,848
Nuclear	1,346,874	-	-	-	-	593,388	2,535,371	29,336,126
Hydro (Total System)							51,203	490,496
Solar (Total System) Total	1,346,874	332	96,630	76,674	975,404	593,388	17,713 6,331,624	258,890 62,343,471
	.,010,017	302	30,000	. 0,01 न	01 0,±0 <del>1</del>	000,000	5,00 I,02T	3 <u>2,</u> 0±0,±1 1
Cost of Reagents Consumed (\$) Ammonia	<u>-</u>	-	-	_	\$28,363	-	\$397,748	\$1,916,632
Limestone	_	_	-	_	ψ <u>2</u> 0,000	_	1,326,591	9,447,644
Re-emission Chemical	-	-	-	<u>-</u>	-	-		138,408
Sorbents	-	_	-	<del>-</del>	-	_	- 469,018	2,624,047
Urea	-	-	-	-	-	-	469,018 176,777	1,038,740
Total	-	-	-	-	¢20.262		-	
ıolai	-	-	-	-	\$28,363	-	\$2,370,135	\$15,165,472

## Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report January 2018

Sche	dι	ıle	6	
Page	1	of	3	

Description	Weatherspoon	Lee	Sutton	Robinson	Asheville
			_	·	
Coal Data:					
Beginning balance	-	-	-	-	133,936
Tons received during period	-	-	-	-	34,247
Inventory adjustments	-	-	-	-	-
Tons burned during period	-	-	-	-	86,897
Ending balance	-	-	-	-	81,286
MBTUs per ton burned	-	-	-	-	25.96
Cost of ending inventory (\$/ton)	-	-	-	-	72.96
Oil Data:					
Beginning balance	593,991	-	2,645,302	78,040	2,809,715
Gallons received during period	266,094	-	-	5,003	4,505,612
Miscellaneous use and adjustments	(50)	-	-	-	(6,779)
Gallons burned during period	170,383	-	-	5,003	4,333,635
Ending balance	689,652	-	2,645,302	78,040	2,974,913
Cost of ending inventory (\$/gal)	2.21	-	2.80	2.51	2.26
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	4,711,134	2,768,560	-	-
MCF burned during period	-	4,711,134	2,768,560	-	-
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	-	14,661
Tons received during period	-	-	-	-	5,289
Inventory adjustments	-	-	-	-	-
Tons consumed during period	-	-	-	-	4,987
Ending balance	-	-	-	-	14,963
Cost of ending inventory (\$/ton)	-	-	-	-	48.90

#### Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

## Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report January 2018

Schedule 6					
Page 2 of	3				

Description	Roxboro	Мауо	Brunswick	Blewett	Wayne County
Coal Data:					
Beginning balance	1,153,464	397,174	-	-	-
Tons received during period	130,120	47,866	-	-	-
Inventory adjustments	-	-	-	-	-
Tons burned during period	371,882	123,472	-	-	-
Ending balance	911,702	321,568	-	-	-
MBTUs per ton burned	25.08	24.92	-	-	-
Cost of ending inventory (\$/ton)	80.81	81.27	-	-	-
Dil Data:					
Beginning balance	379,940	282,143	172,345	769,469	11,673,23
Gallons received during period	444,210	97,828	7,504	-	8,394,43
Miscellaneous use and adjustments	(15,100)	(3,187)	-	-	-
Gallons burned during period	472,290	139,647	10,546	54,335	8,533,67
Ending balance	336,760	237,137	169,303	715,134	11,533,99
Cost of ending inventory (\$/gal)	2.05	2.02	2.51	2.34	2.4
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	4,40
MCF burned during period	-	-	-	-	4,40
Ending balance	-	-	-	-	-
imestone/Lime Data:					
Beginning balance	104,385	17,473	-	-	-
Tons received during period	6,725	8,472	-	-	-
Inventory adjustments	-	-	-	-	-
Tons consumed during period	22,604	7,467	-	-	-
Ending balance	88,506	18,478	-	-	-
Cost of ending inventory (\$/ton)	33.22	36.15	-	-	-

## Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report January 2018

Schedule 6	
Page 3 of 3	

Description	Danlin otan	Smith Energy Complex	Hamia	Current Month	Total 12 ME January 2018
Description	Darlington	Complex	Harris	WiOnth	January 2016
Coal Data:					
Beginning balance	-	-	-	1,684,574	1,837,118
Tons received during period	-	-	-	212,233	3,407,097
Inventory adjustments	-	-	-	-	24,990
Tons burned during period	-	-	-	582,251	3,954,649
Ending balance	-	-	-	1,314,556	1,314,556
MBTUs per ton burned	-	-	-	25.17	25.50
Cost of ending inventory (\$/ton)	-	-	-	80.44	80.44
Oil Data:					
Beginning balance	9,443,966	7,973,861	273,349	37,095,359	38,322,407
Gallons received during period	8,178,153	5,064,043	-	26,962,879	34,151,306
Miscellaneous use and adjustments	-	-	-	(25,116)	(185,822)
Gallons burned during period	7,357,856	4,797,719	3,495	25,878,584	34,133,353
Ending balance	10,264,263	8,240,185	269,854	38,154,538	38,154,538
Cost of ending inventory (\$/gal)	2.42	2.32	2.51	2.40	2.40
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	5	6,555,179	-	14,039,283	162,819,816
MCF burned during period	5	6,555,179	-	14,039,283	162,819,816
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	136,519	125,479
Tons received during period	-	-	-	20,486	221,214
Inventory adjustments	-	-	-	-	14,691
Tons consumed during period	-	-	-	35,058	239,437
Ending balance	-	-	-	121,947	121,947
Cost of ending inventory (\$/ton)	-	-	-	35.59	35.59

### Schedule 7

# DUKE ENERGY PROGRESS ANALYSIS OF COAL PURCHASED JANUARY 2018

STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON	
ASHEVILLE	SPOT	-	-	-	
	CONTRACT	34,247	\$ 2,471,356	\$ 72.16	
	ADJUSTMENTS		112,881		
	TOTAL	34,247	2,584,236	75.46	
MAYO	SPOT				
IVIATO	CONTRACT	- 47,866	3,774,367	- 78.85	
	ADJUSTMENTS		114,893	-	
	TOTAL	47,866	3,889,260	81.25	
ROXBORO	SPOT	-	-	-	
	CONTRACT	130,120	10,563,232	81.18	
	<b>ADJUSTMENTS</b>	-	632,749	-	
	TOTAL	130,120	11,195,981	86.04	
ALL PLANTS	SPOT	_	_	_	
ALL I LAWIO	CONTRACT ADJUSTMENTS	212,233	16,808,955 860,523	79.20	
	TOTAL	212,233	\$ 17,669,477	\$ 83.25	

Schedule 8

# DUKE ENERGY PROGRESS ANALYSIS OF COAL QUALITY RECEIVED JANUARY 2018

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ASHEVILLE	6.43	13.75	11,926	0.75
MAYO	6.62	9.43	12,629	2.00
ROXBORO	6.38	9.11	12,705	1.60

Schedule 9

# DUKE ENERGY PROGRESS ANALYSIS OF OIL PURCHASED JANUARY 2018

	AS	HEVILLE	AS	HEVILLE	BRI	UNSWICK	DA	RLINGTON	DAR	RLINGTON
VENDOR		Indigo	Spartanb	ourg Tank Farm	Hightowe	rs Petroleum Co.	_	wers Petroleum guenot Fuels and Indigo		oro Tank Farm Irtanburg Tank Farm
SPOT/CONTRACT		Spot	C	Contract	(	Contract		Spot	(	Contract
SULFUR CONTENT %		0		0		0		0		0
GALLONS RECEIVED		4,284,808		220,804		7,504		7,806,156		371,997
TOTAL DELIVERED COST	\$	10,510,376	\$	720,442	\$	12,757	\$	19,609,381	\$	830,390
DELIVERED COST/GALLON	\$	2.45	\$	3.26	\$	1.70	\$	2.51	\$	2.23
BTU/GALLON		138,000		138,000		138,000		138,000		138,000
		МАҮО	RO	BINSON	R	OXBORO		TH ENERGY OMPLEX		TH ENERGY DMPLEX
VENDOR	Greensb	oro Tank Farm	Hightowe	rs Petroleum Co.	Greensb	ooro Tank Farm	Co., Pe	wers Petroleum troleum Traders tter Oil and Tire	Petrol	eum Traders
SPOT/CONTRACT	C	Contract	C	Contract	(	Contract		Spot	(	Contract
SULFUR CONTENT %		0		0		0		0		0
GALLONS RECEIVED		97,828		5,003		444,210		4,530,686		533,357
TOTAL DELIVERED COST	\$	207,719	\$	8,505	\$	941,286	\$	10,652,569	\$	1,115,412
DELIVERED COST/GALLON	\$	2.12	\$	1.70	\$	2.12	\$	2.35	\$	2.09
BTU/GALLON		138,000		138,000		138,000		138,000		138,000
		VAYNE	v	VAYNE	WEAT	THERSPOON	WEA	THERSPOON		
VENDOR	_	s Petroleum Co., d Potter Oil and Tire	Greensb	oro Tank Farm		rs Petroleum Co. ter Oil and Tire		Indigo		
SPOT/CONTRACT		Spot	C	Contract		Spot		Contract		
SULFUR CONTENT %		0		0		•				
GALLONS RECEIVED		8,248,272		146,160		261,055		5,039		
TOTAL DELIVERED COST	\$	19,831,290	\$	314,518	\$	640,900	\$	10,779		
DELIVERED COST/GALLON	\$	2.40	\$	2.15	\$	2.46	\$	2.14		
BTU/GALLON		138,000		138,000		138,000		138,000		

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### Duke Energy Progress Power Plant Performance Data Twelve Month Summary

February, 2017 - January, 2018 Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Brunswick 1	8,141,367	938	99.08	98.06
Brunswick 2	7,184,032	932	87.99	90.13
Harris 1	8,080,915	928	99.37	96.69
Robinson 2	5,929,812	741	91.35	88.10

### Twelve Month Summary February, 2017 through January, 2018 Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,496,724	223	76.56	82.66
Lee Energy Complex	1B	1,474,242	222	75.66	83.35
Lee Energy Complex	1C	1,505,056	223	76.90	82.62
Lee Energy Complex	ST1	2,887,735	379	86.98	93.99
Lee Energy Complex	Block Total	7,363,757	1,048	80.21	86.91
Richmond County CC	7	1,238,295	189	74.79	82.09
Richmond County CC	8	1,216,788	189	73.49	80.98
Richmond County CC	ST4	1,401,249	175	91.41	89.76
Richmond County CC	9	1,424,448	214	75.92	80.69
Richmond County CC	10	1,448,792	214	77.22	82.16
Richmond County CC	ST5	1,924,448	248	88.58	91.71
Richmond County CC	Block Total	8,654,020	1,229	80.36	84.73
Sutton Energy Complex	1A	1,400,265	225	71.07	79.67
Sutton Energy Complex	1B	1,443,160	225	73.25	81.69
Sutton Energy Complex	ST1	1,711,417	267	73.08	91.55
Sutton Energy Complex	Block Total	4,554,842	717	72.50	84.72

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

### Duke Energy Progress Power Plant Performance Data Twelve Month Summary

### February, 2017 through January, 2018

#### **Intermediate Steam Units**

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	1,594,299	746	24.40	86.09
Roxboro 2	1,816,832	673	30.82	90.11
Roxboro 3	2,303,212	698	37.67	86.47
Roxboro 4	1,458,166	711	23.41	58.36

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

### Twelve Month Summary February, 2017 through January, 2018 Other Cycling Steam Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Asheville	1	597,908	192	35.55	73.51
Asheville	2	671,768	192	39.94	84.93
Roxboro	1	977,980	380	29.38	86.42

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

### Twelve Month Summary February, 2017 through January, 2018 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	139,269	370	92.43
Blewett CT	164	68	95.37
Darlington CT	141,585	906	81.47
Richmond County CT	1,676,012	918	88.36
Sutton CT	-194	76	98.35
Sutton Fast Start CT	101,034	91	90.06
Wayne County CT	206,143	959	96.26
Weatherspoon CT	1,162	164	81.27

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Schedule 10 Page 6 of 6

## Twelve Month Summary February, 2017 through January, 2018 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	83,331	27.0	82.80
Marshall	4,754	4.0	28.14
Tillery	114,044	84.0	98.70
Walters	288.367	113.0	99.23

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.